

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1 (Currently Amended). A printing apparatus comprising:

a bitmap data storage unit for storing bitmap data;

a bitmap data acquisition unit for acquiring said bitmap data in a matrix of a dot pattern of $n \times m$ from said bitmap data storage unit;

a transformation rule retention unit for retaining data transformation rules for transforming bitmap data; and

a data transformation unit for transforming part of said bitmap data according to said transformation rules, wherein said transformation rules include a matrix of a dot pattern of $n \times m$ before transformation and a matrix of a dot pattern of $n \times m$ after transformation each of which corresponds to each of the before transformation $n \times m$ dot patterns, and according to said transformation rules, if the matrix of a dot pattern of $n \times m$ of said bitmap data matches any one of said $n \times m$ dot patterns before transformation, said pattern is transformed into the corresponding one of said dot patterns after transformation; and

a jaggy elimination processing unit for executing processing of eliminating jaggies on said bitmap data; and

a printing unit for printing data that is produced based on processing results from said jaggy elimination processing unit.

2. (Currently Amended) The printing apparatus according to claim 1, wherein

said jaggy elimination processing unit comprises:

a jaggy detection unit for detecting jaggies appearing on said bitmap data; and

a vector data production unit for producing vector data, based on all stair-like straight lines on jaggies that were detected by said jaggy detection unit, by drawing a straight line from a midpoint of one straight line to a midpoint of another straight line adjacent thereto.

3. (Currently Amended) The printing apparatus according to any one of claims ~~1~~ 7 and 2 further comprising:

~~a transformation rule retention unit for retaining data transformation rules for transforming
bitmap data; and~~

~~a data transformation unit for transforming part of said bitmap data according to said
transformation rules;~~

~~said printing unit for printing data that is produced based on transformation results from
said data transformation unit and processing results from said jaggy elimination processing
unit.~~

4. (Currently Amended) The printing apparatus according to claim ~~3~~ 1, wherein

~~said transformation rules include form of n x m dot pattern is 3 × 3 dot patterns before
transformation and 3 × 3 dot patterns after transformation; and according to said
transformation rules, if a dot pattern on said bitmap data matches any one of said dot
patterns before transformation, said pattern is transformed into a corresponding one of said
dot patterns after transformation.~~

5. (Currently Amended) A computer program stored in a computer readable medium for
executing that enables a computer to execute the steps of:

acquiring bitmap data stored on the computer;

obtaining a matrix in a dot pattern of n x m from said bitmap data;

if the dot pattern matches any one of said n x m dot patterns before transformation,

transforming into the corresponding one of said dot patterns after transformation;

eliminating jaggies appearing on said bitmap data; and

specifying printing of data that is produced based on processing results obtained in said
jaggy elimination step.

6. (Canceled)

7. (New) A printing apparatus according to claim 1, further comprising a jaggy elimination processing unit for executing processing of eliminating jaggies on said bitmap data, and a printing unit for printing data that is produced based on processing results from said jaggy elimination processing unit.

8. (New) A computer program stored in a computer readable medium according to claim 5, further comprising steps of eliminating jaggies appearing on said bitmap data, and specifying printing of data that is produced based on processing results from said jaggy elimination processing unit.

9. (New) A computer program stored in a computer readable medium according to claim 5, further comprising a step of specifying printing of data that is produced based on transformation results from said data transformation unit and processing results from said jaggy elimination processing unit.